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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,010	08/25/2000	Nobuyuki Tomihashi	20-4744P	5697

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

WILSON, DONALD R

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 03/19/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/623,010

Applicant(s)

TOMIHASHI ET AL.

Examiner

D. R. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 11 and 12/11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10, 12/10 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION**Response to Restriction Requirement**

1. Applicant's election with traverse of the inventions of Group V, now Claims 10, 12/10 and 13, in Paper No. 6 is acknowledged. The traversal is on the ground(s) that, (i) the requirement "--- is improper in view of the fact that it is irrelevant whether the initial position of the Examiner is that claim 1 is not patentable over the prior art, and (ii) that there was no Unity of Invention Requirement issued in connection with the International Preliminary Examination Report. This is not found persuasive because as of this date Rule 13.2 is still in effect and relevant.

13.2 Circumstances in Which the Requirement of Unity of Invention Is to Be Considered Fulfilled

Where a group of inventions is claimed in one and the same international application, the requirement of unity of invention referred to in Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. (Underlining added.)

For the reasons set forth in the prior Office Action Accordingly, the special technical feature linking the two inventions, an aqueous fluoroelastomer curable coating composition comprising an aqueous fluoroelastomer dispersion and a basic polyol curing agent, does not provide a contribution over the prior art. The argument that there was no Unity of Invention Requirement issued in connection with the International Preliminary Examination Report truly is irrelevant as a lack of unity requirement can be made at any point prior to the final action. (See 37 U.S.C. § 1.499).

2. The requirement is still deemed proper and is therefore made FINAL. Claims 1-9, 11 and 12/11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

Response to Election of Species Requirement

3. Applicant's election with traverse of the species of the fluoroelastomer and polyol used in Example 1, i.e., (a) a vinylidene fluoride/tetrafluoroethylene/hexafluoropropylene copolymer as the fluoroelastomer, and (b) the sodium salt of bisphenol AF as the basic polyol curing agent, in Paper No. 6 is also acknowledged. Applicant did not elect as required for the Group V inventions, a specie of (d), the

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articles which are coated. However, this is moot as "a roll for office automation equipment" is elected by original presentation of Claim 12. The traversal is on the ground(s) that there is no additional burden on the Examiner to examine the generic elements of the claims. This is not found persuasive because it states a conclusion without any supporting argument. Clearly, examination of all of the elements requires additional effort by the Examiner unless applicant wishes to admit on the record that the species are all obvious over one another.

4. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112, First Paragraph

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. ***Claim 10, 12/10 and 13 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for coated articles wherein the coating composition comprises,***

- a. ***fluoroelastomers containing repeating -CH₂- groups in the backbone, and***
- b. ***basic salts of compounds containing at least two phenolic hydroxyl groups as curing agents,***

does not reasonably provide enablement for coated articles wherein the coating composition comprises fluoroelastomers not containing repeating -CH₂- groups or other basic polyol curing agents. The specification does not enable any person skilled in the art to which it pertains, or with which

it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

In regards to (a), the specification teaches that the fluoroelastomer contains -CH₂- groups in the backbone (specification page 3). As this is apparently required for the curing mechanism it is not seen that fluoroelastomers without this feature would be effective in the instant invention. In regards to (b), the specification only exemplifies basic salts of compounds containing at least two phenolic hydroxyl groups as curing agents. While the specification speaks of "salts of basic compounds with phenol compounds"

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as basic polyol curing agents, it is unclear what the basic compounds are. It is also unclear what polyols, if any, other than those containing phenolic hydroxyl groups can be used. The specification has defined the basic compounds as ammonium, phosphonium, alkali metals, alkaline earth metals, and so on (specification, page 5). However, these are not basic compounds and it is not clear what is meant by salts of "basic compounds with phenol compounds".

Claim Rejections - 35 USC § 112, Second Paragraph

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. ***Claims 10, 12/10 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*** The claims are unclear as the metes and bounds of what is to be included in basic polyol curing agents is unclear. The reasons for lack of clarity have been discussed above.

Objection to Claims

9. ***Claims 10 and 12/10 are objected to as they depend from claims withdrawn from consideration due to a restriction requirement.*** Claim 10 needs to be rewritten in independent form, and Claim 12 needs to depend from Claim 10 only. Correction is required.

Claim Rejections - 35 USC § 102(b)

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. ***Claims 10, 12/10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by EP'096.*** EP'096 is the equivalent to Tomihashi'861 and JP'021.

12. EP'096 discloses coating compositions and their use on surfaces of a fixing roller of a copy machine such as is claimed. The fluororubbers include those of vinylidene fluoride with at least one

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monomer selected from the group which includes tetrafluoroethylene and hexafluoropropene (page 2, lines 49-53). The elected specie of a vinylidene fluoride/tetrafluoroethylene/hexafluoropropene copolymer is exemplified as the fluororubber in the examples. Preferable vulcanizing agents (i.e., curing agents) include bisphenol AF and metal salts thereof (page 4, lines 4-6). One of ordinary skill in the art would have readily envisaged using a metal salt of bisphenol AF as the curing agent because it is one of a limited number of preferred curing agents specifically named. It is taught to disperse the fluororubber and curing agent in a medium, and aqueous dispersions are specifically taught (page 4, lines 11-12 and 28-33). Applying the coating compositions to a surface and vulcanizing it is taught as well as specifically the application to a fixing roller of a copy machine (page 5, lines 21-37).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. ***Claims 10, 12/10 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over EP'096***

In view of Examiner's Notice.

15. EP'096 discussed above is deficient only in regards to specifically teaching that the metal salt of the bisphenol AF curing agent can be the elected specie of a sodium salt. The Examiner takes Notice that the sodium salt of bisphenol AF would be one of the well known metal salts of bisphenol AF used in curing fluororubbers. It would have been obvious to one of ordinary skill in the art use the sodium salt of bisphenol AF as the curing agent in the compositions of EP'096 as it is one of the well known salts used for this purpose.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art of Interest/Technological Background

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
Tomihashi'752 although not available as prior art is cited as being of interest.

Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. R. Wilson whose telephone number is 703-308-2398.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-305-3599 for After Final communications. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.



D. R. Wilson
Primary Examiner
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